

Idaho 4th Grade Direct Mathematics Assessment

Proficient application of basic skills

2003 4th GRADE MAIN RANGEFINDER 3

Well-defined structure

**Your teacher will read the entire test to you before you begin.
Do not use a calculator on this assessment.**

Effective mathematical vocabulary and communication skills

1. Maria and her family went camping and saw many birds. They saw 102 geese, 34 crows, 45 ducks, 16 robins and 23 bluebirds.

- a. How many total birds did they see?
Show or explain how you found your answer.

$$\begin{array}{r}
 \text{geese} - 102 \\
 \text{Crows} - 34 \\
 \text{ducks} - 45 \\
 \text{robins} - 16 \\
 \text{bluebirds} - 23 \\
 \hline
 220
 \end{array}$$

There are 220 birds total.

- b. There are five people in Maria's family. They have 20 slices of bread altogether. How many slices of bread will each person have to feed the birds? Show or explain how you found your answer.

$$5 \div 20 = 4$$

$$\begin{array}{r}
 1 - 5 \\
 2 - 10 \\
 3 - 15 \\
 4 - 20
 \end{array}$$

4 slices of bread to feed the birds.

Adaptable processes

- c. Last year they saw twice as many crows as this year. How many crows did they see last year? Show or explain how you found your answer.

Crows - 34

$$\begin{array}{r}
 34 \\
 + 34 \\
 \hline
 68
 \end{array}$$

They saw 68 Last year.

- d. How many more geese did they see than ducks? Show or explain how you found your answer.

geese - 102

ducks - 45

$$\begin{array}{r}
 102 \\
 - 45 \\
 \hline
 57
 \end{array}$$

They saw 57 more geese than ducks.

Read problems 2, 3, 4, and 5 on this and the next two pages. Select three problems to answer. Answer ALL of the parts of the three problems you select to answer. Cross out the one problem that you do not choose to answer.

2. Mrs. Smith's class asked each teacher to name their favorite fruit. Their choices are listed below.

| Teacher | Favorite Fruit | Teacher | Favorite Fruit |
|-------------|----------------|------------|----------------|
| Mrs. Davis | Apples | Mrs. Baker | Apples |
| Mr. White | Grapes | Ms. Cole | Oranges |
| Mrs. Smith | Apples | Mr. Lopez | Pears |
| Ms. Jones | Oranges | Mrs. Green | Grapes |
| Miss Lowe | Bananas | Ms. Black | Bananas |
| Mrs. Miller | Grapes | Mr. Garcia | Oranges |
| Mr. Hill | Bananas | Mrs. Moss | Grapes |
| Mr. Jay | Grapes | Mr. Johns | Grapes |
| Mr. Cook | Bananas | Miss Jewel | Apples |

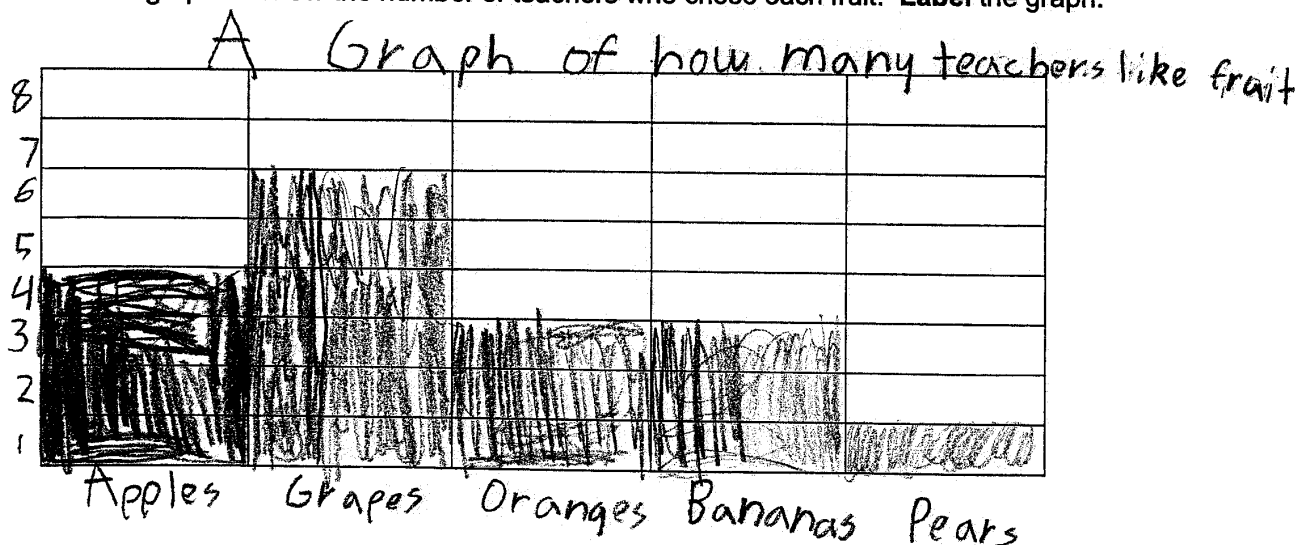
- a. Use tally marks to show the fruit choices.

III Apples
 IIII Grapes
 III Oranges
 III Bananas
 I Pears

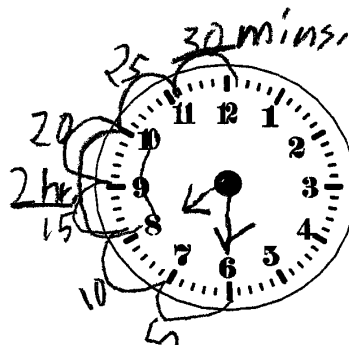
III

Understanding of the problem/situation presented

- b. Make a graph to show the number of teachers who chose each fruit. Label the graph.



3. White Pine School starts at 8:30 AM.
 Morning recess begins at 10:00 AM.
 Lunch begins at 11:50 AM and lasts 40 minutes.
 Afternoon recess begins at 1:45 PM.
 School is dismissed at 3:00 PM.



- a. How long is it from the start of the school day to the beginning of morning recess? Show or explain how you found your answer.

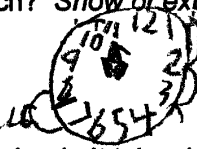
~~8:30~~ 3:00
~~10:00~~
~~11:50~~
~~1:45~~

2 hrs. and
30 mins.

I used
the clock

- b. What time does class begin after lunch? Show or explain how you found your answer.

~~11:50~~
~~+ 40~~
~~2:00~~



~~11:50-10~~
~~12:00-20~~
~~12:10-30~~
~~12:30-40~~

at 12:30,

- c. Clark plays soccer for an hour after school. It takes him 25 minutes to walk home. What time will he get home if he leaves school right after playing soccer? Show or explain how you found your answer.

3:00 + 1 hr. = 4:00 + 25 = 4:25

he will get home at 4:25

4. Jill's dad decided to make a garden with 4 sides. He made the garden 12 feet long and 10 feet wide.

- a. Draw a picture of the garden's shape. Label the length of each of the 4 sides on your picture.

Correct problem-solving strategies

- b. If Jill's dad wanted to put a fence around the garden, how many feet of fence would he need? Show or explain how you found your answer.

5. Bob went shopping and bought these items:

| | |
|---------------|--------|
| Paper | \$2.75 |
| Glue | \$1.25 |
| Crayons | \$1.50 |
| Pencils | ? |

- a. How much did Bob spend on the first three items? Show or explain how you found your answer.

Bob spent
\$5.50.

$$\begin{array}{r} \$2.75 \\ 1.25 \\ + 1.50 \\ \hline \$5.50 \end{array}$$

Effective problem-solving strategies

- b. Bob spent a total of \$6.85 for the four items. Figure out the price of the pencils. Write a number sentence that shows how to solve the problem.

$$\begin{array}{r} \$5.50 \\ + 1.35 \\ \hline \$6.85 \end{array}$$

pencils are \$1.35

Adaptable processes

- c. Bob paid for his supplies with a \$10.00 bill. How much change did he get back? Show or explain how you found your answer.

$$\begin{array}{r} \$10.00 \\ - 6.85 \\ \hline \$4.15 \end{array}$$

his change
is \$4.15.

Occasional computational or surface errors